CLAIMS:

1. An apparatus, comprising:

an oscillation circuit to generate an oscillation signal using a marker, said oscillation circuit to modify a characteristic of said oscillation signal in response to an external source; and

a sensor to receive said oscillation signal, detect said modification, and generate a detect output signal in accordance with said detection.

2. The apparatus of claim 1, wherein said characteristic comprises a frequency, and said sensor receives said oscillation signal and detects a change in said frequency of said oscillation signal, said sensor to output a detect output signal to represent said detected change in frequency.

3. The apparatus of claim 1, wherein said characteristic comprises an amplitude, and said sensor receives said oscillation signal and detects a change in said amplitude of said oscillation signal, said sensor to output a detect output signal to represent said detected change in amplitude.

4. The apparatus of claim 1, wherein said external source comprises one of a metal, a magnet, stress, and temperature.

5. The apparatus of claim 1, wherein said oscillation circuit comprises:

a drive coil to generate a magnetic field;

a marker to generate a marker signal in response to said magnetic field;

a sense coil to receive said marker signal;

an amplifier to amplify said marker signal to form an amplified signal; and

wherein said drive coil to increase said magnetic field in response to said amplified signal, with said oscillation circuit to continue increasing said amplified signal until gain for said amplified signal reaches a predetermined threshold to form said oscillation signal.

6. The apparatus of claim 5, wherein said oscillation signal has a frequency substantially matching a frequency of said marker signal.

7. The apparatus of claim 5, further comprising an automatic gain control circuit to connect to said oscillation circuit, said automatic gain control circuit to receive said amplified signal, determine an amount of gain for said amplified signal, and generate a gain control signal in accordance with said determination.

8. The apparatus of claim 7, wherein said amplifier receives said gain control signal and adjusts gain for said amplified signal in accordance with said gain control signal.

9. The apparatus of claim 5, wherein said sense coil comprises at least two coils connected in series and wound in phase opposition, with one coil having said marker.

10. The apparatus of claim 9, wherein said drive coil is wound around both coils to create approximately equal flux change in both coils.

11. The apparatus of claim 5, wherein said marker has an outer coating to absorb an analyte, and a frequency of said marker signal changes in response to an amount of analyte absorbed by said outer coating.

12. The apparatus of claim 11, wherein said analyte comprises one of a chemical and a gas.

13. The apparatus of claim 5, wherein said sense coil comprises one inductor coil having said marker.

14. The apparatus of claim 5, wherein said drive coil is planarized to improve coupling with said external source.

15. A method, comprising:

generating an oscillation signal using a marker;

modifying a characteristic of said oscillation signal in response to an external source;

detecting said characteristic modification; and

generating a detect output signal in accordance with said detection.

16. The method of claim 15, wherein said generating comprises:

creating a magnetic field;

generating a marker signal in response to said magnetic field;

receiving said marker signal;

amplifying said marker signal to form an amplified signal; and

increasing said magnetic field in response to said amplified signal.

17. The method of claim 16, wherein said marker signal is continuously amplified until gain for said amplified signal reaches a predetermined threshold to form said oscillation signal.

18. The method of claim 16, wherein said amplifying comprises:

receiving said amplified signal;

determining an amount of gain for said amplified signal; and

generating a gain control signal in accordance with said determination.

19. The method of claim 16, wherein said oscillation signal has a frequency substantially matching a frequency of said marker signal.

20. The method of claim 15, wherein said characteristic comprises a frequency, and said detecting comprises:

detecting a change in said frequency of said oscillation signal; and

generating said detect output signal to represent said detected change in frequency.

21. The method of claim 15, wherein said characteristic comprises an amplitude, and said detecting comprises:

detecting a change in said amplitude of said oscillation signal; and

generating said detect output signal to represent said detected change in amplitude.

22. A system, comprising:

an external source;

a detector to detect said external source, said detector comprising an oscillation circuit to generate an oscillation signal having a frequency to match a marker signal from a marker, with a characteristic of said marker signal to change in response to said external source; and

a sensor to monitor said characteristic and detect said change, and generate a detect output signal to represent said change in said characteristic.

23. The system of claim 22, further comprising an alarm system to receive said detect output signal, and generate at least one of an audible sound and visual indicator to represent a change in a characteristic of said oscillation signal in response to said external source signal.